

CLAIMS

1. The use of an effective inhibitor of a bacterial α -amylase and/or α -glucosidase in the manufacture of a composition for the treatment of acidosis.
2. The use according to claim 1 for the treatment of chronic acidosis.
- 5 3. The use according to claim 1 for the treatment of acute acidosis.
4. The use according to any one of claims 1,2 or 3 where the inhibitor of bacterial α -amylase and/or α -glucosidase has an IC_{50} of $10^{-3}M$ or less.
5. The use according to any one of claims 1,2, 3 or 4 wherein the inhibitor is selected from one of the inhibitors mentioned here in relation to preferred inhibitors.
- 10 6. The use according to claim 5 wherein the inhibitor is selected from acarbose and the higher homologues thereof, Trestatin A, Trestatin C, the compound of Fraction 21 of Example 7 herein, Example 8 herein, and the fermentation broth products mentioned herein.
7. The use according to claim 6 wherein the inhibitor is selected from acarbose and the higher homologues thereof, Trestatin A, Trestatin C, the compound of Fraction 21 of Example 7 herein and the compound of Example 8 herein.
- 15 8. The use according to claim 7 wherein the inhibitor is selected from acarbose and Trestatin C.
9. A method of treatment of rumen acidosis which comprises administration of an effective amount of an effective inhibitor of a bacterial α -amylase and/or α -glucosidase to a ruminant.
- 20 10. A method according to claim 9 for the treatment of chronic acidosis.
11. A method according to claim 9 for the treatment of acute acidosis.
12. A method according to any one of claims 9, 10 or 11 where the inhibitor of bacterial α -amylase and/or α -glucosidase has an IC_{50} of $10^{-3}M$ or less.
- 25 13. A method according to any one of claims 1, 10, 11 or 12 wherein the inhibitor is selected from one of the inhibitors mentioned here in relation to preferred inhibitors.
14. A method according to claim 13 wherein the inhibitor is selected from acarbose and the higher homologues thereof, Trestatin A, Trestatin C, the compound of Fraction 21 of Example 7 herein, Example 8 herein, and the fermentation broth products mentioned herein.
- 30 15. A method according to claim 14 wherein the inhibitor is selected from acarbose and the higher homologues thereof, Trestatin A, Trestatin C, the compound of Fraction 21 of Example 7 herein and the compound of Example 8 herein.
16. A method according to claim 15 wherein the inhibitor is selected from acarbose and Trestatin C.
- 35 17. A formulation suitable for the treatment of acidosis in an animal which comprises an effective inhibitor of a bacterial α -amylase and/or α -glucosidase in admixture

with a suitable excipient, diluent or carrier selected with regard to the intended route of administration and standard pharmaceutical / veterinary / farming practice.

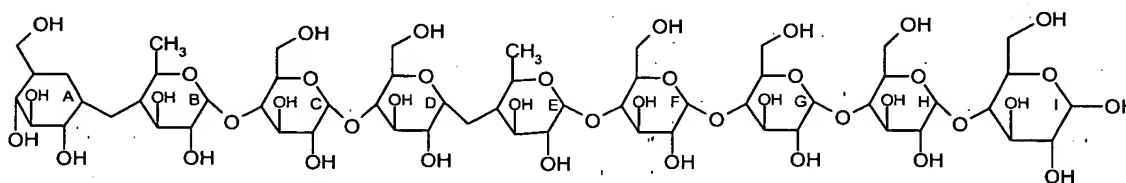
18. A formulation according to claim 17 wherein the inhibitor is selected from those mentioned in any one of claims 1, 2, 3, 4, 5, 6, 7 or 8.

5 19. The use of any one or more of the screen methods described herein in the identification of a suitable inhibitor of a bacterial α -amylase and/or α -glucosidase for the treatment of acidosis in a ruminant.

20. A process for improving ruminant milk quality and/or quantity which comprises treatment of a ruminant with an effective amount of an inhibitor of bacterial α -amylase and/or α -glucosidase.

21. A process according to claim 20 wherein the inhibitor is as defined in any one of claims 4, 5, 6, 7 or 8.

22. A compound of the formula I:



15 or veterinarily acceptable salt, solvate (including hydrate) or prodrug thereof.

23. The compound of formula I according to claim 22 for use in medicine.

24. The compound of formula I according to claim 22 for use in treatment of acidosis in a ruminant.

20 25. A process to make an effective inhibitor of a bacterial α -amylase and/or α -glucosidase useful for the treatment of acidosis in a ruminant as described herein in relation to any of the Examples.